

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

OBJECTIONS TO THE SPECIFICATION

The disclosure had been objected to since, on page 2, words in a paragraph appeared to run together without spacing between words. It is believed this problem has arisen due to justification used in the specification document. It appears that there are in fact spaces between the words, but the spaces are small. At any rate, the first paragraph of page 2 of the present specification is replaced in this amendment, indicating the passage believed to be at issue. If any other passages are deemed objectionable, it is respectfully requested that these passages be indicated.

THE REJECTIONS UNDER 35 U.S.C. § 112

Claim 11 had been rejected under Section 112, second paragraph as allegedly being indefinite. The Examiner states that the claim 11 specifies what or how the device is intended to be used, and that such recitation does not further limit the structure of the device. In response thereto, claim 11 has been amended so as

to indicate that the present automatic sampler "is a component in an instrument for liquid chromatography." Reconsideration and withdrawal of this rejection is respectfully requested.

THE INVENTION

The present embodiments are directed to an "automatic sampler" of the type used with an analyzer for analyzing a liquid, such as a liquid chromatograph. The present automatic sampler includes a plurality of sample vessels, a needle for collecting liquid samples sequentially from the sample vessels. The needle preferably contains a non-noble base metal and having an outer surface coated with a coating material that has a chemical activity lower than a chemical activity of the base metal of said needle. In one preferred embodiment of the invention, as specified in the present claim 1 as amended, the coating material includes a noble metal including platinum, a platinum group metal, or gold that is plated or deposited on said needle. The embodiment as specified in new claim 13 recites that the coating material is a noble metal including platinum, a platinum group metal, or gold that is plated or deposited on said needle. In another preferred embodiment, as specified in the present claim 3 as amended, the coating material includes a synthetic resin coating that is coated on said needle. In still another preferred embodiment, as recited in the present claim 5 as amended, the coating material includes a non-noble metal that has a chemical activity lower than a chemical activity of iron and is plated or deposited on said needle.

As specified in newly-recited claims 14-17, it should be appreciated that the

present automatic sampler is a component in an instrument that includes "a liquid analysis apparatus" for receiving the liquid samples collected by the needle. Preferably, the liquid analyzing apparatus is a liquid chromatograph. Also, a rinsing means is included for rinsing the needle after collecting the liquid samples. The present invention, as thus defined above and by the present claims, is therefore very different from the prior art relied upon by the Examiner.

THE REJECTIONS UNDER 35 U.S.C. § 102

Claims 1, 5, 11 and 12 had been rejected under Section 102(b) as allegedly being anticipated by El-Hage et al. (U.S. Pat. No. 5,543,378). Claims 1, 2, 5, 6, 8, 9, and 11-12 had been rejected under Section 102(b) as allegedly being anticipated by Smith (U.S. Pat. No. 4,309,912). Claims 1-2, 6, 8, 9, and 11-12 had been rejected under Section 102(b) as allegedly being anticipated by Hoskins et al. (U.S. Pat. No. 3,883,305). Claims 1-2, 6, 11 and 12 had been rejected under Section 102(e) as allegedly being anticipated by King al. (U.S. Pat. No. 6,132,582). Claims 1, 3, 5, 9, 11 and 12 had been rejected under Section 102(e) as allegedly being anticipated by Hutchens et al. (US 2002/01555620). Claims 1-2, 6, 9, 11 and 12 had been rejected under Section 102(e) as allegedly being anticipated by Li et al. (U.S. Pat. No. 6,365,024). These rejections are respectfully traversed, particularly as applied to the claims as presently amended.

As indicated above, various rejections had been made under Section 102, applied to various originally-presented claims. However, it is clear that none of the above-indicated references can be construed as disclosing, "an automatic sampler

comprising a plurality of sample vessels, and a needle for collecting liquid samples sequentially from the sample vessels,” as recited in the independent claims.

Further, none of the references disclose an automatic sampler in combination with “a needle containing a non-noble base metal” and having an inner surface and an outer surface where the outer surface is “coated with a coating material that has a chemical activity lower than a chemical activity of the base metal of said needle,” as recited in the independent claims. Still further, none of these references disclose that an automatic sampler is a component in an instrument that includes “a liquid analysis apparatus,” preferably a liquid chromatograph, for receiving the liquid samples collected by the needle, and also, a rinsing means is included for rinsing the needle after collecting the liquid samples, as required by the newly-added dependent claims.

In view of the above, it is clear that the cited references do not disclose every feature of the independent claim, in accordance with the requirements for anticipation set forth in Section 102. Therefore, it is respectfully submitted that the references relied upon by the Examiner cannot be construed as anticipating independent claims 1, 3, 5 and 13 as presented herewith. Reconsideration and withdrawal of these rejections is therefore respectfully respected.

THE REJECTIONS UNDER 35 USC § 103

Claim 9 had been rejected under Section 102(b) as anticipated by or, in the alternative, under Section 103(a) as obvious over El-Hage et al. Claim 7 had been rejected under Section 103(a) as being unpatentable over Hutchens et al., further in

view of Smith (U.S. Pat. No. 6,482,362) or, alternatively, Turner et al. (U.S. Pat. No. 6,455,316). Claims 4 and 10 had been rejected under Section 103(a) as being unpatentable over El-Hage et al. and further in view of Harris Sr. (U.S. Pat. No. 4,404,862). These rejections are also respectfully traversed, particularly as applied to the claims as presently amended.

Dependent claims 4, 7, 9 and 10 have been rejected under Section 103(a) as indicated above. However, it is respectfully submitted that the secondary references used in these combinations also fail to disclose an "automatic sampler" comprising a plurality of sample vessels, and a needle for collecting liquid samples sequentially from the sample vessels, as is required by the present independent claims. Still further, none of these references disclose that an automatic sampler is a component in an instrument that includes "a liquid analysis apparatus," preferably a liquid chromatograph, for receiving the liquid samples collected by the needle, and also, a rinsing means is included for rinsing the needle after collecting the liquid samples, as required by the newly-added dependent claims. Therefore, even if these references could somehow be properly used in combination with the respective base references, the combinations would still fail to satisfy the requirements of independent claims upon which these claim depend.

In any event, it is respectfully submitted that these dependent claims, along with the others subject to the rejections under Section 102, would distinguish over the prior art for at least the same reasons as the independent claims from which the depend. Reconsideration and withdrawal of these rejections is therefore respectfully requested.

In light of the foregoing, it is respectfully submitted that the present application

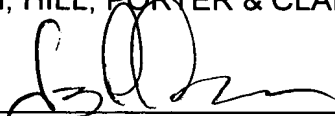
is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. NGB-12930.

Respectfully submitted,

RANKIN, HILL, PORTER & CLARK LLP

By


Jay P. Ryan
Agent for Applicant
Registration No. 37,064

4080 Erie Street
Willoughby, Ohio 44094
(216) 566-9700